

**REMARKS**

**Summary of the Office Action**

The abstract is objected to because it is longer than 150 words.

The title of the invention is allegedly not descriptive.

Claims 5-9 stand rejected under 35 U.S.C. § 101 because claims 5-9 are allegedly directed to an information record medium storing nonfunctional descriptive material.

Claims 5-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura et al. (U.S. Patent No. 6,151,441) (hereinafter "Kawamura") in view of Kazuo (JP 6236555) (hereinafter "Kazuo").

**Summary of the Response to the Office Action**

Applicants have amended the Title and Abstract to improve their form. Applicants have canceled claims 6, 11 and 16 without prejudice or disclaimer because their features were added to independent claims 5, 10 and 15, respectively. Applicants have added new claims 20-28 to differently describe embodiments of the disclosure of the instant application's specification. Accordingly, claims 5, 7-10, 12-15 and 17-28 are currently pending for consideration.

**Objection to the Abstract**

The abstract is objected to because it is longer than 150 words. Applicants have replaced the previous abstract with a new abstract that has less than 150 words. Withdrawal of the objection to the abstract is thus respectfully requested.

**Requirement for a New Title**

The title of the invention is allegedly not descriptive. Accordingly, a new title is required. Applicants have amended the title to improve its form. As a result, withdrawal of the requirement for a new title is respectfully requested.

**Rejection under 35 U.S.C. § 101**

Claims 5-9 stand rejected under 35 U.S.C. § 101 because claims 5-9 are allegedly directed to an information record medium storing nonfunctional descriptive material. The Examiner cites to MPEP § 2106.IV.B.1 in this regard. This rejection is respectfully traversed because the very portion of the MPEP cited by the Examiner cites to In re Lowry, 32 F.3d 1579, 1583-84 (Fed. Cir. 1994) for the proposition that a “claim to data structure stored on a computer readable medium that increases computer efficiency held statutory.” Independent claim 5 is directed to an information record medium arrangement that includes data stored in particular ways that increases the efficiency of the information reproducing apparatus that will read the medium, as described throughout the specification of the instant application. See, for example, page 37, lines 8-20 of the instant application’s specification.

Even so, in an effort to expedite the prosecution of this application, independent claim 5 is newly-amended to impart additional functional interrelationship between the information recorded on the record medium with an information reproducing apparatus by specifying that the information record medium is “readable by an information reproducing apparatus.”

See MPEP § 2106 IV.B.1.(a) which directs that “a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the

data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. See, for example, U.S. Patent No. 6,088,506, assigned to Pioneer Corporation, which includes an issued recording medium claim 1 in this format. Many other examples of such issued recording medium claims are also known to Applicant. See, for example, claim 1 of U.S. Patent No. 5,889,746 and claim 1 of U.S. Patent No. 6,091,674.

Accordingly, for at least the foregoing reasons, Applicants respectfully submit that claims 5-9 fully comply with 35 U.S.C. § 101. Withdrawal of the rejections under 35 U.S.C. § 101 is thus respectfully requested.

**Rejection under 35 U.S.C. § 103(a)**

Claims 5-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kawamura in view of Kazuo. Applicants have canceled claims 6, 11 and 16 without prejudice or disclaimer because their features were added to independent claims 5, 10 and 15, respectively. Withdrawal of the rejection of remaining claims 5, 7-10, 12-15 and 17-19 is respectfully requested for the following reasons.

Applicants respectfully submit that Kawamura merely discloses a recording medium having a single layer. As conceded to by the Examiner at page 4 of the Office Action, there is no teaching or suggestion in Kawamura of a medium having both a first layer and a second layer.

In addition, the Examiner also concedes at page 4 of the Office Action that Kawamura does not teach "the lead-in area, the management information for the whole of the recording medium, and the data group are recorded on the first recording layer; wherein the lead-out area

and the data group are recorded on the second layer, wherein the lead-in area is recorded at the inner radius side of the information recording medium; and wherein the lead-out area is recorded at the inner radius side of the information record medium.”

The Examiner then applies Kazuo as allegedly meeting all of these very specifically recited features of independent claim 5. Applicants respectfully traverse the Office Action’s interpretation of Kazuo for at least the following reasons.

Kazuo merely discloses a recording medium having both a first layer and a second layer. However, Applicants respectfully submit that Kazuo does not teach, or even suggest, a data structure of the recording medium. As a result, the very specific combination of data structure features described in independent claim 5 are surely not met by Kazuo.

Therefore, even assuming, strictly arguendo, that a persons skilled in the art would be led to combine Kawamura and Kazuo, as suggested by the Office Action, the result would merely be a recording medium having both a first layer and a second layer in which the data structures described in Kawamura are formed respectively. In other words, each of the first and second layers would have the same data structure layouts.

On the other hand, in embodiments of the disclosure of the instant application, as described in detail in independent claim 5, for example, “a lead-in area, management information for the whole of recording information, and the data group” are recorded on the first recording layer. In addition, “a lead-out area and a data group” are recorded on the second recording layer. Even further, “the lead-in area is recorded at the inner radius side of the information record medium” on the first layer, and “the lead-out area is recorded at the inner radius side of the information record medium” on the second layer. Applicants respectfully submit that this

specific combination of features of the respective first and second recording layers of the information record medium are not taught, or even suggested, by any of the applied references, whether taken separately or in combination. Each of the first and second recording layers of the information record medium of independent claim 5 has its own exclusive arrangement of data structures, as described in the claim.

Even so, in an effort to expedite prosecution in this application, Applicants have even further amended each of independent claims 5, 10 and 15 to include the features of previous claims 6, 11 and 16 to further describe the information recording medium as having “a mid area at the outer radius side of the first recording layer” and another “mid area at the outer radius side of the second recording layer.” Applicants respectfully submit that this feature is also neither shown nor suggested by any of the applied references, whether taken separately or in combination.

The features described in independent claim 5 of a very specific layout of data on respective first and second layers of the information record medium result in particular advantages over prior arrangements that are neither shown nor even suggested in the applied references. See, for example, page 37, lines 8-20 of the instant application’s specification. As a result, Applicants respectfully submit that even assuming, strictly arguendo, that a person skilled in the art was to combine Kawamura and Kazuo in the manner asserted by the Office Action, the specific combination of features described in independent claim 5 would still not be obtained. Similar arguments also apply to newly-amended independent claims 10 and 15.

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because neither Kawamura nor Kazuo, whether taken singly or combined,

teach or suggest each feature of independent claims 5, 10 and 15, as amended. MPEP § 2143.03 instructs that “[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 409 F.2d 981, 180 USPQ 580 (CCPA 1974).” Furthermore, Applicants respectfully assert that dependent claims 7-8, 12-14 and 17-19 are allowable at least because of their dependence from claims 5, 10 or 15, and the reasons set forth above.

### **Newly-Added Claims**

Applicants have added new claims 20-28 to differently describe embodiments of the disclosure of the instant application’s specification. Claims 20-22 are allowable at least because of their dependence from claims 5, 10 or 15, and the reasons set forth above, and for the additional features that they recite. Also, new claims 23-28 are allowable for similar reasons as discussed above with regard to claims 5, 10 and 15, and for the additional features that they recite.

### **CONCLUSION**

In view of the foregoing, Applicants submit that the pending claims are in condition for allowance, and respectfully request timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants’ undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573. This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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